







Greenfield Digital Equity Plan 2024

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INTRODUCTION

While many Greenfield residents can access the internet at home, work, school and throughout the community, the COVID-19 pandemic exposed the digital divide that continues to exist within the city. As students and employees shifted to online and work-at-home models, the awareness and consequences of this long-time disparity became evident.

As with heat, electricity and water, broadband must be made affordable and available for all residents. It is vital for students to learn and thrive, businesses to remain nimble and competitive, for seniors to take advantage of telehealth options and aging-in-place, and a host of endless useful applications. Affordable and reliable broadband access is a necessary component of life in the modern world.

Eliminating the Digital Divide through Digital Equity

The **digital divide** is the gap between individuals and households who have access to connected devices with reliable and affordable high-speed internet, along with the skills to use them, and those who do not. The National Digital Inclusion Alliance defines **digital equity** as a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is vital for civic and cultural participation, employment, lifelong learning, and access to essential services.

Communities should embrace digital equity to eliminate the digital divide. Digital equity requires intentional strategies and investments to reduce and eliminate historical, institutional, and structural barriers to access to, and use of, technology.

The three components of digital equity are:

1. Affordable Connection: whether the internet connection is fast, reliable and affordable.

Digital Equity Plans should focus on "covered populations." These are defined by the National Telecommunications and Information Agency (NTIA) as groups within a population who have a higher likelihood of experience digital inequity.

Covered Populations:

- Individuals who live in low-income households
- Aging individuals (60 and above)
- Individuals who are incarcerated
- Veterans
- · Individuals with disabilities
- Individuals with a language barrier
- Individuals who are members of a racial or ethnic minority group
- Adequate Device: whether an individual or household has the necessary and needed digital device, such as a desktop, laptop, or tablet.
- 3. Digital Literacy: whether residents know how to use technology properly and successfully for their needs, and whether they are receiving quality information and can assess privacy risks.

Along with broadband adoption, many residents need devices, technical support and training to fully access internet services, educational resources, employment and the social aspects of the digital world. While there has been significant investment over the past decade, Greenfield is not yet meeting the 21st century expectations of a robust and thriving community as residents continue to face a disparity in reliable access, affordability, and digital literacy.

Greenfield's Digital Equity Plan helps tackle internet disparities exposed by COVID, guiding investments to bridge the digital divide. This plan will help prepare the city to submit grant proposals to state or federal programs that support digital equity activities.

Greenfield Planning Process

Digital Equity Steering Committee

The Digital Equity Steering Committee (the Committee) is a team of community members with a stake in information and technology resources for the city of Greenfield. In collaboration with the contracted consultant, the Committee met four times over the course of the planning process, provided guidance and oversight on developing this Plan, facilitated public engagement opportunities, and liaised with the community. See the Acknowledgments section for the Committee membership.

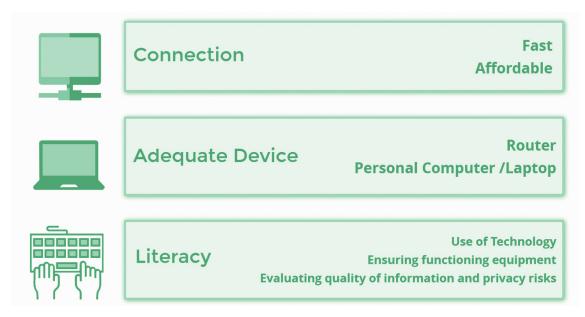
Community Outreach and Engagement

Robust community outreach and engagement provided insights into both the needs of Greenfield residents and the available digital equity assets. We pursued multiple avenues of outreach and engagement to better understand the current conditions relating to digital equity. There was a Community Meeting in December 2023 with eighteen attendees, and two (2) focus groups. The first was for older adults with lower incomes living in affordable housing, held at the Weldon Apartments in February 2024. The second was held for local veterans at the Greenfield Elk's Lodge in March 2024. Brief

surveys were provided to attendees in both focus groups (see Appendix D). The Greenfield Recorder ran an article on the meeting at the Weldon and broadband conditions in apartment complexes in Greenfield.¹

In addition, FRCOG staff met individually with key community stakeholders to gather additional information on specific issues of digital equity, current projects, and ideas for future projects. Meetings were held with the Superintendent of the Greenfield School District, the Greenfield Library Director, and the Greenfield Senior Center Director, as well as the Director of Community Services at LifePath (the area agency on aging).

The Massachusetts Broadband Institute (MBI) created a statewide Digital Equity Survey to gather information about needs, barriers, and opportunities from Massachusetts residents. The survey was available online and in print and provided in nine languages (English, Spanish, Portuguese, Chinese, Haitian Creole, Vietnamese, Russian, Arabic, and Khmer). The online survey was promoted on the City's website, the Franklin Regional Council of Governments' website & social media, and sent out via the Franklin county Resource Network. There were 46 responses from Greenfield residents.



Adapted from the Massachusetts Broadband Institute

¹ "Connectivity Woes Bedevil the Weldon in Greenfield" (https://www.recorder.com/city-officials-FRCOG-talk-to-Weldon-residents-about-internet-needs-54180210)

VISION AND GOALS

The Committee established a citywide vision for digital equity in Greenfield with three overarching goals to guide the city. Both the Vision and the Goals were developed through the steering committee meetings, feedback during a community meeting, and focus groups.

Greenfield's Digital Equity Vision

Greenfield envisions universal access for all residents in Greenfield to affordable high-speed internet, with the appropriate devices. Access is not a privilege for those who can afford it, but a right for all who call Greenfield home.

The Greenfield Digital Equity Plan will lay the groundwork for both shortterm and long-term investments for Greenfield to reach digital equity. With this plan, the city will be well-positioned to compete for broadband funds that may become available through federal, state, and private sector broadband infrastructure and digital equity funding to be sure all residents are able to access affordable, high speed-speed internet with appropriate devices."

Greenfield's Digital Equity Goals

Goal 1: Connectivity

Support residents' access to their choice of affordable, reliable internet connectivity to meet their needs.

Goal 2: Digital Literacy

Ensure every resident in Greenfield has the opportunity to learn the skills needed to effectively use digital technology, including safety.

Goal 3: Framework for Promoting and Supporting Digital Equity

Develop and maintain a framework to continue promoting and supporting digital equity for all residents of Greenfield.

Strategies and actions based on these Goals are included in **Section IV** of this plan.

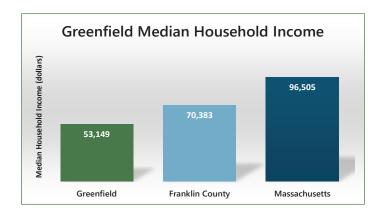
EXISTING CONDITIONS

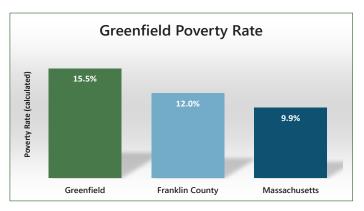
Greenfield's Demographics

The city of Greenfield is located at the confluence of the Green, Deerfield, and Connecticut rivers. A cross of rural and urban, Greenfield is the only city in Franklin County, the most rural county in Massachusetts. Greenfield sits alongside major transportation routes, including MA Route 2, Interstate 91, and an Amtrak rail line.

The city has a population of 17,674 with 8,146 households², and is the most populous municipality in Franklin County. It is the county seat and serves as the governmental and commercial center of the county. While Greenfield is considered an urban municipality by standards set out by the Massachusetts Broadband Institute, it is considered rural by other metrics, including the United States Department of Agriculture (USDA).³

A common measure of income for an area is the median household income.⁴ The median household income for Greenfield is \$53,149, significantly lower than the county median income, and almost half that of Massachusetts. At over 15%, the poverty rate in Greenfield is significantly higher than both the county and the state.





Source: U.S. Census Bureau, 2022 American Community Survey (ACS) 5-Year Estimates

Location	Civilian Veterans	Population w/a Disability	Speak Language Besides English at Home	People of Color	Households w/Children	Households w/65+ Years of Age	Total Population 65+	Total Population 18 and Under
Greenfield	9%	23%	8%	13%	23%	39%	24%	19%
Franklin County	8%	17%	7%	11%	23%	39%	23%	17%
Massachusetts	5%	12%	25%	31%	28%	32%	20%	20%

Table 1: Covered Populations. Source: U.S. Census Bureau, 2022 American Community Survey (ACS) 5-Year Estimates

² A household consists of all the people who occupy a housing unit. A household includes the related family members and all the unrelated people, if any, such as lodgers, foster children, wards, or employees who share the housing unit.

³ A This Plan uses the MBI definition of Rural, based on the Massachusetts state Office of Rural Health definition, which considers a municipality to be rural if it meets one of the following criteria: Meets at least one of three federal rural definitions at the sub-county level (Census Bureau, Office of Management and Budget, or Rural-Urban Commuting Area Codes), and/or has a population less than 10,000 people and a population density below 500 people per square mile, and/or has an acute care hospital in the town that meets the state hospital licensure definition of a small rural hospital, or is a certified Critical Access Hospital. However, the USDA classifies Greenfield as a rural community (United states Department of Agriculture).

⁴ For this purpose, this includes the income in households that have families, people living alone as well as unrelated people living together. The median is the middle statistic in a data set, which makes the measurement relatively unaffected by extreme numbers (either the very wealthy or very poor) from influencing the overall figure.

The population data reveals several unique challenges Greenfield faces in achieving digital equity, and affordability is a key concern regarding covered populations.

Age: Greenfield's senior population (over 65) is significantly higher than the state average, with a substantial portion (over 16%) living in poverty. This creates a similar affordability issue as discussed earlier, with limited income potentially hindering internet access.

Youth (under 18): While affordability might not be the sole concern for young people, there could be challenges with access to devices or limitations on data plans within families.

Disabilities: At nearly double the state's percentage, Greenfield has a significant population with disabilities. This group might have specific needs when it comes to digital access, requiring specialized equipment or software that could add to the overall cost.

Veterans: Greenfield's veteran population (9%) faces a potential overlap with the low-income bracket (almost 7% veterans living in poverty). Similar to seniors, veterans on fixed incomes might struggle to afford internet services.

Race and ethnicity demographics also provide potential insights into where digital equity should be prioritized. While 92% of the population in Greenfield is white, there is a growing Latino population, currently at 6% of the population. As evidenced by school enrollment, racial and ethnic minority populations are growing in Greenfield. The most recent data from the MA Department of Elementary and Secondary Education shows that 21% of students are Latino/Hispanic, 3% African American, 1% Asian and 5% Multi-Race. Further, almost 9% of students are considered English Learners. Regarding education attainment, more than 9% of residents do not have a high school equivalency and less than 35% have a bachelor's degree or higher.

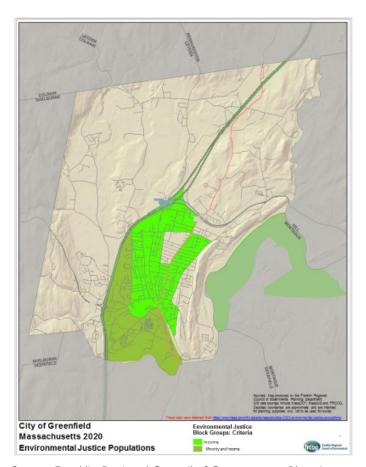
Digital Divide and Race: Nationally, there's a well-documented digital divide along racial lines. This suggests that Greenfield's growing

Latino population (and potentially other minority groups) might have lower rates of internet access or digital literacy skills compared to the majority white population.

Language Barrier: The 9% of students classified as English Learners highlights a potential need for language-specific resources. This could include translated internet content, discounted rates for bilingual internet plans, or digital literacy programs offered in Spanish or other languages.

Education and Digital Equity: The data on educational attainment (low high school completion rate and low college degree attainment) suggests that a segment of the population might lack the foundational skills or confidence to fully participate in the digital world.

By considering race, ethnicity, and educational attainment alongside the previously discussed



Source: Franklin Regional Council of Governments Planning Department. Data obtained from https://www.mass.gov/info-details/massgis-data-2020-environmental-justice-populations

factors like age, income, and disability, Greenfield can create a comprehensive digital equity plan that addresses the needs of all its residents.

In Greenfield, there are ten Census Block Groups considered to have Environmental Justice (EJ) populations based on income and/or percentage of minority residents. The locations (as seen in the preceding map) are heavily concentrated in the city's downtown area. Median household income is significantly lower in these sections, and minority population is significantly higher. Greenfield is also considered a Justice40 Community.

The Justice 40 Initiative was implemented at the federal level to confront and address decades of underinvestment in disadvantaged communities. The initiative will bring resources to communities most impacted by climate change, pollution, and environmental hazards. A community is highlighted as disadvantaged on the Climate and Economic Justice Screening Tool (CEJST) map if it is in a census tract that is (1) at or above the threshold for one or more environmental, climate, or other burdens, and (2) at or above the threshold for an associated socioeconomic burden. Greenfield has two census tracts that are considered disadvantaged, one based on energy and housing, and the other based on housing and workforce development.5

By recognizing the connections amongst environmental justice, disadvantaged communities, and digital equity, Greenfield can develop a targeted and impactful approach to

Region	Unemployment Rate	Labor Force Participation Rate	Percent working from Home
Franklin County	5.7%	63.1%	13.7%
Massachusetts	5.3%	67.1%	14.6%
Greenfield	5.4%	57.1%	13.3%

Table 2: Labor Data. Source: U.S. Census Bureau, 2022 American Community Survey (ACS) 5-Year Estimates

closing the digital divide for all its residents.

Labor Force and Economy

Inability to connect to reliable, affordable high-speed internet, lack of access to digital devices, and lack of digital literacy, negatively impact the economic vitality of a municipality. Due to the lack of accessible broadband infrastructure within the city, some local businesses have not been able to build their businesses and expand their workforce. While the unemployment rate is similar to Massachusetts overall and slightly lower than the county, the labor force participation rate in Greenfield is significantly lower than both the county and the state. The percentage of employees working from home is also less than both the county and the state.

Lack of access to reliable and affordable internet and devices likely plays a role in residents' ability to work remotely, or at least have the option to do so. According to a recent report from the National Skills Coalition (NSC) in partnership with the Federal Reserve Bank of Atlanta, 92% of jobs analyzed require digital skills.⁶ Lack of digital literacy skills negatively impacts residents' ability to obtain or hold a job.

Digital Equity

The factors determining digital equity include: **Connection** (ability to connect to affordable and reliable broadband service), **Access to Devices** (affordable access to appropriate devices like computers or tablets), and **Digital Literacy** (ability to navigate the internet safely and effectively). The City of Greenfield has taken strides to provide all three elements to residents; however, the data suggests there is still work to do.

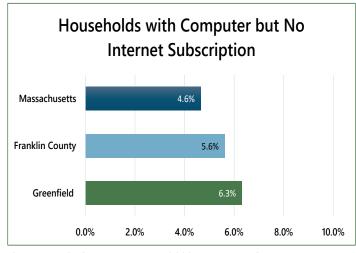
Reliable and Affordable Connection

Having a reliable and affordable internet connection is necessary for many activities in the 21st century. Feedback from a focus group at the the Weldon Apartments highlighted

⁵ The CEJST Map is available at: https://screeningtool.geoplatform.gov/en/

^{6 &}quot;Closing the Digital Skill Divide" (https://nationalskillscoalition.org/resource/publications/closing-the-digital-skill-divide/)

the importance of affordable internet and the barriers that exist. Multiple residents noted how difficult it was to obtain consistent and reliable internet within the building. One resident noted that she has constant issues with the internet. Very recently the internet went down and her landline was not going through. She was unable to do many of the things she needed to do during the day, like grocery shopping online. Online shopping is very important for her because her credit card is secure. She needs an aide to go to the grocery store and pick up the groceries for her and can't send the credit card with the aide. A second resident noted that a cable technician told her the wiring is very old in the building and needs to be updated. She noted she loses her internet often and had several cellphone carriers and calls get dropped. She also has Life Alert (a personalized emregency response system), which cannot work without internet. Many older adults and people with disabilities rely on devices like this to call 911.



Source: U.S. Census Bureau, 2022 American Community Survey (ACS) 5-Year Estimates

While overall Massachusetts has increased internet access, there is still a percentage of households that do not have internet. In Greenfield, the percentage of households with a computer but no internet subscription is higher than in both the county and the state. FCC's National Broadband Map indicates 100% of Greenfield households are "served,"

	Tests	% of Total Tests
Speeds < 25 x 3 Mbps	125	3%
Speeds < 50 x 10 Mbps	335	8%
Speeds < 100 x 20 Mbps	819	19%
Speeds at least 25 x 3 Mbps	3856	89%
Speeds at least 50 x 10 Mbps	3178	73%
Speeds at least 100 x 20 Mbps	1958	45%
Speeds at least 100 x 100 Mbps	645	15%
Total Tests: 4333; Unique ID Tests: 6	77	

Table 3: Speed Tests in Greenfield (collected by Mass Broadband Institute February 2022)

meaning they can connect to and use internet at speeds of at least 100/20 Mbps (the federal fixed broadband speed benchmark). However, we can infer that this is not accurate based on community meetings, focus groups, and resident feedback, as well as speed test data.⁷

Actual internet speeds can be difficult to measure due to various factors (time of day, how many users are currently on-line, how close a user is to a router, what service plan has been purchased, etc.). Speed-test data can provide a baseline understanding of how well a community is reaching advertised broadband speeds. The data for Greenfield suggests most residents are not experiencing broadband speeds under the current definition, as 55% of the speed tests in the above table are not meeting broadband speeds of 100/20 Mbps.

The data does not differentiate between types of internet or different service providers. This is important information to ascertain, as there are issues both with receiving advertised "up to" speeds by the coax providers (especially at certain times of day, such as when school is let out or during prime time), and sections of the town where the internet service drops daily, particularly in older apartment complexes, where

⁷ FCC Broadband Data Collection (https://www.fcc.gov/BroadbandData)

⁸ To learn about the FCC map and how to file challenges, see: https://help.bdc.fcc.gov/hc/en-us/sections/10467243210651-Consumers-Individuals

old wiring and thick walls prevent optimal service. The FCC does allow a Challenge process.⁸ As part of the upcoming Broadband Equity, Access, and Deployment (BEAD) Program, Massachusetts will be coordinating a challenge process to help better ensure the accuracy of the coverage data.⁹ This will allow municipalities, like Greenfield, to better understand where there is limited or poor broadband connection within town.

There are two major broadband service providers in Greenfield, Comcast/Xfinity (a cable provider) and Greenfield Community Energy & Technology, dba GCET (a Municipal Light Plant providing Internet, Streaming TV and Phone). Verizon DSL is also an option for residents but does not qualify as broadband and does not meet the needs of residents. Comcast did not provide us with coverage or subscriber information. GCET indicated there were approximately 2,026 household subscribers, and coverage of approximately 84% of dwellings in Greenfield.

Comcast provides asymmetric internet, meaning download and upload speeds are different over coax to residents. They provide various plans based on price and maximum speed. The most basic plan is called Connect and has 150 Mbps download speed and 10 Mbps upload speed. According to Comcast's website, the typical speed is 175/114 Mbps. The fastest plan available in Greenfield is the Gigabit x10 plan, with 10,000/10,000 Mbps, with the advertised typical speed as 2087/206 Mbps (see Table 4 for a breakdown of costs).

GCET built, maintains, and operates a fiber optic cable network for residents, businesses, and public entities in Greenfield and provides either broadband services via Fiber or Fixed Wireless. GCET offers three plans, with 30/30 Mbps, 100/100 Mbps, and 200/200 Mbps (see Table 4 for costs). Unlike service providers using asymmetrical internet, GCET offers symmetrical internet through all its plans. Symmetrical connections offer the same speeds for both

GCET Plans*	Max Advertised Speeds (Mbps)	Monthly Cost
TrueSpeed Home 30/30	30/30	\$49.00
TrueSpeed Home 100/100	100/100	\$59.00
TrueSpeed Home 200/200	200/200	\$79.00

Source: GCET website

(https://www.gcet.net/residential/truespeed/)

*All plans include the router/modem and Wi-fi with no additional charges.

Comcast Plans*	Max Advertised Speeds (Mbps)	Monthly Cost**
Connect	150/10	\$68.00
Connect More	300/10	\$90.00
Fast	500/10	\$105.00
Super Fast	800/15	\$110.00
Gigabit	1000/20	\$115.00
Gigabit Extra	1200/35	\$120.00
Gigabit Pro	10,000/10,000	\$300.00

Source: Comcast rate sheet for Greenfield and Montague (https://www.cnet.com/home/internet/xfinity-internet-re-view/)

- * Comcast also offers Internet Essentials (50/10 Mbps) and Internet Essentials Plus (100/10 Mbps) for \$9.95 and \$29.95 per month respectively. To enroll in either of these plans, consumers must show proof of ACP enrollment since September 2023 within 60 days, or they will be moved to the Connect plan.
- ** Standard rate after promotional period. Does not include costs from bundling with TV or other services; does not include setup or installation fees, or fees for purchase of any needed equipment such as routers.

Table 4: Available Internet Plans in Greenfield

downloading and uploading. Businesses and remote workers benefit from symmetrical internet connections as they frequently handle large data uploads. With greater reliance on internet by businesses, and growth in remote work, having symmetrical internet is becoming more vital to a thriving economy.

Table 4 provides a snapshot of currently available speeds (maximum advertised speeds) and costs.

⁹ The Massachusetts BEAD Challenge process will begin in June 2024. More information on the Massachusetts BEAD Challenge is available on the MBI website (https://broadband.masstech.org/bead-challenge-process)

¹⁰ Max speeds are listed in the following review from CNET (https://www.cnet.com/home/internet/xfinity-internet-review/).

Based on the rate sheet for Greenfield from Comcast, costs range from the basic offering of \$68/month to a premium offering for \$300/month; GCET offers three plans, ranging from \$49.00 per month for 30/30 Mbps, up to \$79.00 per month for 200/200 Mbps.

Not only is having a broadband connection required for digital equity, but it must be affordable. Affordability remains a constant threat to digital equity, particularly for the covered populations as described above. As a recent study showed, even as broadband connection becomes more available in rural communities, the costs of service often remain insurmountable.¹¹

Broadband costs can be difficult to comprehensively measure due to various factors, including levels of speed, teaser rates and discounts, and bundling options. However, nationwide, one study found that the median cost of high-speed internet was \$74.99 per month.¹² Further, around half of households were paying between \$60 and \$90 per month. According to the FCC's most recent 2024 Section 706 Report, the national medium price for 100/20 Mbps is \$101.13 Locally, based on 17 responses to the household survey, the average monthly cost for internet service was \$101, with a range of \$25-\$209. It is unclear whether the higher pricing indicated in the responses (two indicated monthly pricing over \$200 and 11 other responders indicated costs of \$100 or more) was for internet only, or a bundled service.

Both survey and focus group data indicate cost as a barrier to connection. Based on the household survey (44 responses), 32% said paying for internet service was *Somewhat Hard*

or Very Hard. During the focus group held with older adults at the Weldon Apartments, 70% of participants noted it was difficult to afford their bill. One attendee noted that Comcast is the only internet service available in the building. She explained how her experience has been generally negative as she had to fight with Comcast when they raised her costs without any requests for additional service. She related how previously she was paying \$20 per month, but now is paying \$90, although with a \$30 ACP credit now.

There are very few programs that directly assist households with affording internet service. One program is the Affordable Connectivity Program (ACP), a benefit program run by the Federal Communications Commission. The ACP provided a discount of up to \$30 per month for internet services of eligible households.14 The FCC collected data on which households were eligible and how many are enrolled in the program. In Greenfield, there are 3,120 eligible households, which accounts for more than one-third of all households in Greenfield (38%). As of summer 2023, 49% of eligible households were enrolled in the ACP, indicating this program was popular within the city but also underutilized. 15 The household survey showed that 46% either hadn't heard of the program or didn't know.

Unfortunately, due to a lack of additional funding from Congress, the Affordable Connectivity Program ceased to accept new applications after February 7, 2024. Funding for the program was projected to run through April 2024. Once the program ends, households will no longer receive the ACP discount on their monthly internet bill. Currently there is no program to replace the ACP, although there is significant outreach to extend the program.

¹¹ "As Broadband Deserts Recede, Cost of Service Still a Question" (https://www.govtech.com/network/as-broadband-deserts-recede-cost-of-service-still-a-question)

¹² Broadband Pricing: What Consumer Reports Learned from 22,000 Internet Bills (https://advocacy.consumerreports.org/wp-content/uploads/2022/11/FINAL.report-broadband.november-17-2022-2.pdf)

^{13 2024} Section 706 Report (https://docs.fcc.gov/public/attachments/FCC-24-27A1.pdf)

¹⁴ For more information on qualification, see https://www.affordableconnectivity.gov/do-i-qualify/

¹⁵ ACP Enrollment & Claims Tracker (https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/)

¹⁶ For more information on ACP and its closing, see https://www.affordableconnectivity.gov/

Region	No Desktop or Laptop	No Smartphone	No Other Computer
Franklin County	14%	13%	35%
Massachusetts	12%	7%	30%
Greenfield	19%	15%	39%

Table 5: Device Access. Source: U.S. Census Bureau, 2022 American Community Survey (ACS) 5-Year Estimates

Device Access

Approximately 15% of households in Greenfield do not have a smartphone, while 19% do not have a desktop or laptop. These are significantly higher percentages than the state. Not having a reliable desktop or laptop computer can negatively impact a household, preventing the ability to work remotely, access government services, and access educational material for students of all ages.

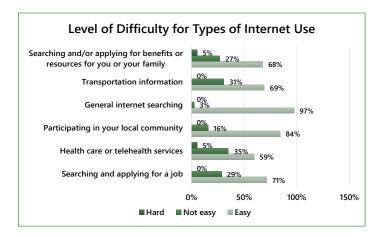
During our outreach meeting with residents of the Weldon, one attendee noted "I would like to use a desktop computer but need it hooked up. I would love to print my own info but my computer is not hooked up good. I only use my phone which runs slow, which is WiFi." Further, 41% of respondents to a brief survey provided out the outreach meeting indicated their household does not have access to the computer devices they need to meet their everyday needs for internet use.

When residents do not have access at home to the appropriate devices to meet their needs, they are often able to access devices through other service providers like libraries, schools and the senior center. Interviews with staff from each of these in Greenfield indicated heavy use of devices, particularly at the library. Greenfield Public Library staff noted the library can loan up to six laptops, but there is enough demand for double that number.

Digital Literacy

Digital literacy is more difficult to quantify than either an affordable broadband connection or

access to devices. People need different things to participate online; some may need to know how to turn on a computer—others may want to learn how to code. Digital literacy means different things for different age groups. It also means different things for English language learners. When asked to rank the difficulty of using the internet for various tasks (i.e. job search, healthcare or telehealth services, etc.) most respondents indicated Easy. However, 41% said it was Not Easy or Hard to use the internet for Health or Telehealth Services, 31% said it was Not Easy or Hard to access Transportation Information, and 32% said it was Not Easy or Hard to use the internet to Search or Apply for Benefits for You or Your Family.



Cyber security and the need for protecting systems, networks, and programs from digital attacks, as well as educating users on how best to achieve this, is growing digital literacy issue. Based on the household survey, 91% of responders were either *Somewhat Concerned* or *Very Concerned* about internet security.

Digital Assets¹⁷

Although there are areas of digital inequity in Greenfield, the city and surrounding region provide numerous assets that promote and implement digital equity.

Public libraries, like the Greenfield Public Library (GPL), are an important source for digital equity, providing free onsite device usage, technical assistance, as well as other benefits like free Wi-Fi. GPL is housed in a new building that provides

¹⁷ See Appendix for list of local and regional assets.

numerous technology and digital services. These include one on one technology assistance, the ability to rent out mobile Wi-Fi hotspots, and numerous e-resources (Hoopla, Canopy and Libby). The library is also working with the Alliance for Digital Equity on device distribution. This will entail providing free, refurbished IPads and laptops, along with information sessions.

Serving Western Massachusetts, The Alliance for Digital Equity is a coalition of community-focused organizations working toward digital equity for all people. The goal of the Alliance is to get people the access they need—to the equipment, infrastructure, and knowledge and skills—that will allow them to fully participate in the digital world.

https://sites.google.com/view/alliancefordigitalequity/home

Education

In response to COVID-19, classroom technology use has become more extensive in Greenfield Public Schools (EPSD). The stated goal of the district is to be a one-to-one district, where there is 1 computer/1 student. However, staff indicated they have run into issues of access, particularly with internet connection and device access at home. The district has considered administering a survey to better understand student and family needs, but has found the return rate on surveys tends to be limited.

Within the current curriculum, the school district works to integrate technology training into the classroom. This approach used to have tech teachers but curriculum wasn't really working. According to staff, the largest technology issues with students' center around a lack of awareness of online issues, suggesting the need for further and continuous training.

Greenfield Public Schools have taken advantage of E-Rate Funding, a universal support program for schools and libraries. Eligible schools, school districts and libraries may apply for funding under two categories of service: category one services to a school or library (telecommunications, telecommunications services and Internet access), and category two services that deliver Internet access within schools and libraries (internal connections, basic maintenance of internal connections, and managed internal broadband services). Greenfield's Public Schools receive the highest percentage (90%) applied to the internet services. The percentage of assistance is based on the rate of poverty and the school's location (rural or urban). In addition, each of the individual schools in Greenfield that have applied to be a participant of the E-Rate program have received funds, including Stoneleigh Burnham and Four Rivers Charter School.

DIGITAL ASSETS: GREENFIELD COMMUNITY COLLEGE "CYBER SENIORS"

Previously, Greenfield Community College established a program to address the digital equity challenge faced by older adults, modeled after the international program, "Cyber Seniors" https://cyberseniors.org/. The program is structured so that younger residents (who are digital natives) meet one-on-one with older adults to assist them with laptops, phones, tablets and questions related to technology. In the summer of 2023, the Greenfield Senior Center received a grant from the Executive Office of Elder Affairs, and partnered with GCC for expansion of this program. The program is currently funded through December 2024; GCC is working to continue the program beyond the end of the grant.



Digital Equity Assets and Services in Greenfield and Franklin County

Assets and Strengths

 Local services like hotspots to borrow from the library and free Wi-Fi within all three libraries (grant funded)



- Local services like the new Tech Drop-In program and computer training class at the Senior Center (grant funded)
- Regional networks and support services like the <u>Franklin County</u> <u>Resource Network</u>, administered by <u>Community Action Pioneer Valley</u>
- Regional services through the 413Cares.org/Digital Equity (working with the Alliance for Digital Equity)
- Digital literacy programs for seniors, including the <u>Cyber Senior Program</u> through <u>GCC</u>
- Availability of broadband in most communities in Franklin County through the MBI <u>Last Mile program</u>
- MBI, as the State Broadband Office, will work with state agencies and departments to optimize funding sources and coordinate across the state (for example, working closely with local governments and agencies and deployment of the BEAD Challenge process)
- Coordination through organizations like CWMARS

Needs and Challenges

- Staff and programs are heavily grant dependent. Lack staff and resources to provide services or other programs
- One-time funding
- Reliance on volunteers
- Difference in bandwidth quality
- Gaps in cell service due to varied geography
- Reliance on federal and state funding due to the COVID pandemic to purchase devices and provide digital equity services
- Reliance on external funding sources
- Need for staff/capacity
- Need for an asset map so people know where to go for services (ex. <u>Seattle-King County Digital Equity</u> <u>Asset Map</u>)
- Having an individual or organization to coordinate between organizations



RECOMMENDATIONS AND ACTION PLAN

This section provides a plan of action for the City of Greenfield to work towards addressing the digital divide in the city, and achieving the digital equity goals outlined above.

These strategies, and accompanying actions, were developed by the Steering Committee and city staff, with input from the community. Certain strategies and actions were influenced by current projects and programs, (like the work being done by GCET, Greenfield Community College, and both the Greenfield Library and Senior Center), while others are based on new community feedback, best practices, and evolving technology trends.

The Recommendations and Action Plan includes the following:

- Populations being served by specific strategies;
- Lead organization (in all cases, the City), as well as the department or board/committee that could be responsible for implementation;
- Supporting partners;
- Potential funding sources;
- Targeted timeframe for completion of a given strategy, defined as:
 - "Short-term" (less than 2 years)
 - "Medium-term" (2–5 years)
 - "Long-term" (more than 5 years).

Goal 1: Connectivity Ensure all Greenfield res	oal 1: Connectivity Ensure all Greenfield residents have reliable and affordable internet access.	fordable internet access.	
Implementation Strategy (Target time period)	 Apply for MBI/other funding site-specific, low income hou Explore ways to support the (Short Term) Explore funding & partnersh Continue city funding for Grung Term) Explore potential funding for program & to support local 	Apply for MBI/other funding opportunities to expand GCET's infrastructure & servic site-specific, low income housing GCET expansion (Short Term) Explore ways to support the Affordable Connectivity Program (ACP)/fund a replace (Short Term) Explore funding & partnerships to expand public Wi-Fi (Short/Medium Term) Continue city funding for Greenfield Public Library's free hotspot devices lending por Long Term) Explore potential funding for expansion of Greenfield Public Library's free hotspot derogram & to support local organizations to develop similar programs (Short Term)	 Apply for MBI/other funding opportunities to expand GCET's infrastructure & services & provide site-specific, low income housing GCET expansion (Short Term) Explore ways to support the Affordable Connectivity Program (ACP)/fund a replacement program (Short Term) Explore funding & partnerships to expand public Wi-Fi (Short/Medium Term) Continue city funding for Greenfield Public Library's free hotspot devices lending program (Short/Long Term) Explore potential funding for expansion of Greenfield Public Library's free hotspot devices lending program & to support local organizations to develop similar programs (Short Term)
Population Served	Primarily low income & senior	Primarily low income & seniors living in older apartment buildings in Greenfield	ngs in Greenfield
Lead Organization	City of Greenfield (Mayor's Office; Community and Economic Development Dept.)	Supporting Partners	 Greenfield Community Energy & Technology (GCET) Greenfield Public Library (GPL) FRCOG
Potential Funding Source(s)	MBI grants (i.e. Municipal Digi	tal Equity Implementation Fund,	MBI grants (i.e. Municipal Digital Equity Implementation Fund, Retrofit, BEAD); other federal funding
Actions	 Apply for MBI Municipal Dig internal space design/archite management, and networkir requirements & costs to pro- older apartment buildings in Develop outreach and engage Fund a GCET employee(s) to for data analysis of current in interventions. 	Apply for MBI Municipal Digital Equity Implementation Program funding to allow GCET tinternal space design/architecture, network architecture, internet service site planning, nananagement, and networking equipment & configuration to be able to research & deterequirements & costs to provide broadband internet for site specific, low income housing older apartment buildings in Greenfield currently underserved. Develop outreach and engagement activities to promote Greenfield's Digital Equity Plan Fund a GCET employee(s) to engage individually with residents in targeted underserved for data analysis of current internet service, need for ACP, & assess appropriate program interventions.	 Apply for MBI Municipal Digital Equity Implementation Program funding to allow GCET to develop internal space design/architecture, network architecture, internet service site planning, network management, and networking equipment & configuration to be able to research & determine the requirements & costs to provide broadband internet for site specific, low income housing, such as older apartment buildings in Greenfield currently underserved. Develop outreach and engagement activities to promote Greenfield's Digital Equity Plan goals. Fund a GCET employee(s) to engage individually with residents in targeted underserved apartments for data analysis of current internet service, need for ACP, & assess appropriate program interventions.

Goal 2: Framework for Promoting and S Promote the existing framework for sup framework, and expand where needed.	Goal 2: Framework for Promoting and Supporting Digital Equity Promote the existing framework for supporting digital equity in (framework, and expand where needed.	oal 2: Framework for Promoting and Supporting Digital Equity Promote the existing framework for supporting digital equity in Greenfield, build connections to the framework, and expand where needed.	uild connections to the
Implementation Strategy (Target time period)	 Adopt a City of Greenfield policy for prioritizing digit: Medium Term) Continue city funding for Greenfield Public Library's c devices lending program (laptops) (Short/Long Term) Explore potential funding for expansion of Greenfield programs (Short/Medium Term) Explore potential funding to support local organizatic use devices & provide secure/private spaces for assisting explore funding for free/low cost devise distribution to continue to promote digital equity and coordination continued Steering Committee meetings and/or conv (Long Term) 	 Adopt a City of Greenfield policy for prioritizing digital equity goals, objectives, & actions (SP Medium Term) Continue city funding for Greenfield Public Library's onsite computer/laptop use devices & of devices lending program (laptops) (Short/Long Term) Explore potential funding for expansion of Greenfield Public Library's digital devices lending programs (Short/Medium Term) Explore potential funding to support local organizations to develop similar programs to host use devices & provide secure/private spaces for assisted internet access (Short Term) Explore funding for free/low cost devise distribution to targeted populations (Short Term) Continue to promote digital equity and coordination of implementation of the plan through continued Steering Committee meetings and/or convening practitioners and relevant organi (Long Term) 	 Adopt a City of Greenfield policy for prioritizing digital equity goals, objectives, & actions (Short/Medium Term) Continue city funding for Greenfield Public Library's onsite computer/laptop use devices & digital devices lending program (laptops) (Short/Long Term) Explore potential funding for expansion of Greenfield Public Library's digital devices lending programs (Short/Medium Term) Explore potential funding to support local organizations to develop similar programs to host public use devices & provide secure/private spaces for assisted internet access (Short Term) Explore funding for free/low cost devise distribution to targeted populations (Short Term) Continue to promote digital equity and coordination of implementation of the plan through continued Steering Committee meetings and/or convening practitioners and relevant organizations (Long Term)
Population Served	All Greenfield residents, with a residents	specific focus on older adults, p	All Greenfield residents, with a specific focus on older adults, people with disabilities, and low income residents
Lead Organization	City of Greenfield (Mayor's Office; Community and Economic Development Dept.)	Supporting Partners	 Franklin Regional Council of Governments (FRCOG) Greenfield Community College (GCC) GPL Alliance for Digital Equity Clinical & Support Options Inc. (CSO) MassHire Franklin Hampshire Career Center (MHFHCC)
Potential Funding Source(s)	MBI grants (i.e. Municipal Digi Elder Affairs (EOEA), U.S. Depa	MBI grants (i.e. Municipal Digital Equity Implementation Fund); Massachusetts Executiv Elder Affairs (EOEA), U.S. Department of Education; other federal funding; foundations	MBI grants (i.e. Municipal Digital Equity Implementation Fund); Massachusetts Executive Office of Elder Affairs (EOEA), U.S. Department of Education; other federal funding; foundations
Actions	 Research & apply for funding Work to ensure connections 	• Research & apply for funding opportunities to sustain & expand digital equity programs • Work to ensure connections between partners, cross promotion, & expand where needed	nd digital equity programs on, & expand where needed

Goal 3: Digital Literacy Ensure every resident in Greenfield has		the opportunity to effectively and safely use digital technology.	ly use digital technology.
Implementation Strategy (Target time period)	 Continue city funding for Greenfield Pub Technology Sessions" (Short/Long Term) Explore potential funding for expansion workshops (Short Term) Work with Greenfield Community Colleg digital learning courses & workshops & Addigital Learning Courses & Workshops & Worksho	 Continue city funding for Greenfield Public Library's digital navigator services & "One-on-One Technology Sessions" (Short/Long Term) Explore potential funding for expansion of Greenfield Public Library's computer/digital learnin workshops (Short Term) Work with Greenfield Community College to explore potential funding to sustain their computedigital learning courses & workshops & CyberSeniors digital literacy support program for oldedigital learning courses & workshops & CyberSeniors digital literacy support program for oldedigital learning courses & workshops & CyberSeniors digital literacy support program for oldedigital learning courses & workshops & CyberSeniors digital learning courses & workshops & CyberSeniors digital literacy support program for oldedigital learning courses & workshops & CyberSeniors digital literacy support program for oldedigital learning courses & workshops & CyberSeniors digital learning course & CyberSeniors digital learni	 Continue city funding for Greenfield Public Library's digital navigator services & "One-on-One Technology Sessions" (Short/Long Term) Explore potential funding for expansion of Greenfield Public Library's computer/digital learning workshops (Short Term) Work with Greenfield Community College to explore potential funding to sustain their computer/digital learning courses & workshops & CyberSeniors digital literacy support program for older
	• Promote and support organis sustain & potentially expand literacy classes/workshop, di	 Promote and support organizations providing digital literacy services & technical assistance to sustain & potentially expand their programs & services for one on one technical assistance, dig literacy classes/workshop, digital navigator services, Cybersecurity/safety support, etc. (Short/I Term) 	Promote and support organizations providing digital literacy services & technical assistance to sustain & potentially expand their programs & services for one on one technical assistance, digital literacy classes/workshop, digital navigator services, Cybersecurity/safety support, etc. (Short/Long Term)
Population Served	All Greenfield residents, with a residents	s specific focus on older adults, p	All Greenfield residents, with a specific focus on older adults, people with disabilities, and low income residents
Lead Organization	City of Greenfield (Mayor's Office; Community and Economic Development Dept.)	Supporting Partners	 Franklin Regional Council of Governments (FRCOG) Greenfield Community College (GCC) GPL Alliance for Digital Equity Clinical & Support Options Inc. (CSO) The Literacy Project
Potential Funding Source(s)	MBI grants (i.e. Municipal Digi Elder Affairs (EOEA), U.S. Depa	MBI grants (i.e. Municipal Digital Equity Implementation Fund); Massachusetts Executi Elder Affairs (EOEA), U.S. Department of Education other federal funding; foundations	MBI grants (i.e. Municipal Digital Equity Implementation Fund); Massachusetts Executive Office of Elder Affairs (EOEA), U.S. Department of Education other federal funding; foundations
Actions	Research & apply for fundingWork to ensure connections	 Research & apply for funding opportunities to sustain & expand digital equity programs Work to ensure connections between partners, cross promotion, & expand where needed 	nd digital equity programs on, & expand where needed

APPENDIX A: Acknowledgments

The Greenfield Digital Equity Plan was made possible with support from the Massachusetts Broadband Institute (MBI) and Massachusetts Technology Collaborative (MassTech). This project was funded by MBI at the MassTech Collaborative through the Municipal Digital Equity Planning Program. Funding was provided by Massachusetts American Rescue Plan Act (ARPA) State Fiscal Recovery Funds. The contributions of the Digital Equity Steering Committee and project stakeholders join the comments of residents and stakeholders who participated in meetings and surveys throughout the Digital Equity planning process.

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Lynne Feldman

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Christopher Demars

Director, Upper Pioneer Valley Veterans' Service District

APPENDIX B: Digital Equity Assets

Organization Name	Municipal, Regional, or Statewide	Website
Alliance for Digital Equity	Regional	https://sites.google.com/view/alliancefordigitalequity/home
Big Brothers Big Sisters Franklin county	Regional	https://bbbs-fc.org/
Black Economic Alliance Foundation	National	https://foundation.blackeconomicalliance.org/
Center for New Americans	Regional	https://cnam.org/
GCET	Municipal	https://www.gcet.net/
City of Greenfield	Municipal	https://greenfield-ma.gov/
Clinical Support Options	Regional	https://www.csoinc.org/
Community Action Pioneer Valley	Regional	https://www.communityaction.us/
Community Compact Cabinet	State	https://www.mass.gov/orgs/community-compact-cabinet
Community Foundation of Western Massachusetts	Regional	https://communityfoundation.org/
CSforMA, Inc.	State	https://www.csforma.org/
Executive Office of Elder Affairs (EOEA)	State	https://www.mass.gov/orgs/executive-office-of-elder-affairs
Community Health Center of Franklin county	Regional	https://www.chcfc.org/
Franklin County Sheriff's Office	Regional	https://www.fcso-ma.us/
Franklin Regional Council of Governments	Regional	https://frcog.org/
Greenfield Council on Aging	Municipal	https://greenfield-ma.gov/departments/council_on_aging_se- nior_center/index.php
Greenfield Community College	Regional	https://www.gcc.mass.edu/
Greenfield Public Library	Municipal	https://greenfieldpubliclibrary.org/
LifePath	Regional	https://lifepathma.org/
MA Healthy Aging Collaborative	State	https://mahealthyagingcollaborative.org/
MA Association for Community Action	State	https://www.masscap.org/
MA Association for the Blind and Visually Impaired	State	https://www.mabvi.org/
MA Board of Library Commissioners	State	https://mblc.state.ma.us/
MA Business Alliance for Education	State	https://www.mbae.org/
MA Department of Elementary & Secondary Education	State	https://www.doe.mass.edu/
MA Education and Career Opportunities, Inc. (MassEdCO)	State	https://www.massedco.org/
MA League of Community Health Centers (CHC)	State	https://www.massleague.org/
Mass Computer Using Educators (MassCUE)	State	https://www.masscue.org/
New England Cable & Telecommunications Association	State	https://connectingne.com/
Salasin Project	Regional	https://salasinproject.org/
The Literacy Project	Regional	https://www.literacyproject.org/
Three County Continuum of Care (a project of Community Action Pioneer Valley via HUD)	Regional	https://www.threecountycoc.communityaction.us/
T-Mobile	State	https://www.t-mobile.com/
United Way of the Franklin and Hampshire Region	Regional	https://uw-fh.org/
Verizon	National	https://www.verizon.com/
Xfinity/Comcast	National	https://www.xfinity.com/overview

APPENDIX C: Funding Resources

Program	Type of Assistance
State Digital Equity Capacity Grant Program https://www.internetforall.gov/program/digital-equity-act-programs#	 A \$1.44 billion formula grant program for states, territories, and tribal governments. Funds an annual grant program for five years in support of digital equity projects and the implementation of digital equity plans: Develop, implement, and oversee DE plans + make awards to other entities help develop DE plans. Improve online accessibility & inclusivity of public resources. Implement DE plans and digital inclusion activities. Provide digital literacy and skills education to covered populations. Facilitate adoption of high-speed internet by covered populations. Fund annual grant programs for five years to implement digital equity projects.
State Digital Equity Competitive Grant Program https://www.internetforall.gov/program/digital-equity-act-programs#	A \$1.25 billion competitive grant program to fund annual grant programs for five years to implement digital equity projects. Several types of entities can apply for these funds.
Municipal Digital Equity Implementation Program https://broadband.masstech.org/digital-equity-implementation	Funding to mobilize, start-up, and implement digital equity activities locally to access a one-time grant up to \$100,000 per municipality to execute a project (or projects) defined in their local digital equity plan or related document that MBI deems of sufficient standard. Project implementation will increase access and usage of the internet for the populations most impacted by the COVID-19 pandemic.
Broadband Equity, Access, and Deployment (BEAD) Program https://broadbandusa.ntia.doc.gov/funding-programs/broadband-equi-ty-access-and-deployment-bead-program	Expand high-speed internet access by funding planning, infrastructure deployment and adoption programs. This program builds high-speed Internet infrastructure where needed. It also supports efforts to teach the skills and provide the equipment needed so everyone can use the Internet.
Community Compact Municipal Fiber Program https://www.mass.gov/municipal-fiber-grant-program	 Implementation of fiber optic networks that connect remote municipal assets to improve municipal operations and/or improve disaster recovery and resiliency. One time capital needs- fiber optic cabling, hardware, software and implementation services. (Centralized management of IT infrastructure, enterprise approach to network monitoring, cybersecurity, records management, and backup and recovery.)
GAP Networks Grant Program https://broadband.masstech.org/gap-networks-grant-program	The \$145 million Gap Networks Grant Program will fund the deployment of broadband infrastructure in areas that currently lack broadband service. The Program aims to expand access and connectivity in unserved and underserved locations throughout the Commonwealth to bridge the digital divide.

Program	Type of Assistance
E-rate: Universal Service Program for Schools and Libraries https://www.fcc.gov/general/e-rate-schools-libraries-usf-program	The schools and libraries universal service support program, commonly known as the E-rate program, helps schools and libraries to obtain affordable broadband.
Lifeline program for Low-income consumers https://www.fcc.gov/lifeline-consumers	 Discount on phone or broadband service for qualifying low-income consumers. 2. Promote access to Wi-Fi enabled devices and hotspot functionality to close the homework gap Note: A family that qualifies for Lifeline also qualifies to receive EBB
Affordable Connectivity Program (ACP) https://www.fcc.gov/acp	 The Affordable Connectivity Program is an FCC benefit program that helps ensure that households can afford the broadband they need for work, school, healthcare and more. \$30 discount per month for internet service for eligible households; \$75 discount for qualifying Tribal lands One time \$100 discount to purchase a laptop, desktop computer, or tablet if the contribute between \$10 to \$50 toward purchase price.
Affordable Connectivity Program (ACP) Outreach Grant https://www.fcc.gov/acp-grants	The ACP Outreach Grant Program provides eligible governmental and non-governmental entities with the funding and resources needed to increase awareness of and participation in the ACP among those eligible households most in need of affordable connectivity.
Community Compact IT Grant Program https://www.mass.gov/community-compact-it-grant-program	 This is a competitive grant program focused on driving innovation and transformation at the local level via investments in technology. Grant to support implementation of innovative and transformative IT projects by funding one-time capital needstech infrastructure and/or purchases of equipment/ software. One-time planning, design, installation, implementation, and initial training.
Efficiency and Regionalization (E&R) Grant Program https://www.mass.gov/efficiency-regionalization-grant-program	Provide financial support for governmental entities (planning and implementation activities are eligible).
Telecommunications Industry Registered Apprenticeship Program (TIRAP) https://www.tirap.org/	 A competency-based apprenticeship aimed at growing the productivity of the workforce as directly as possible. Career development of telecommunications workforce through cash and in-kind support. Funding to design curricula and deliver training to develop qualified applicants for placement in middle- to high-skilled jobs To target veterans, transitioning service members, military spouses, women, people of color, unemployed, underemployed, and underrepresented populations.
Economic Adjustment Assistance Grant https://www.eda.gov/economic-adjustment-assistance	EAA provides a wide range of technical, planning, and public works and infrastructure assistance in regions experiencing adverse economic changes that may occur suddenly or over time.

Program	Type of Assistance	
Local Planning and Technical Assistance Programs https://www.eda.gov/sites/default/files/filebase/files/programs/eda-programs/FY21-23-Planning-and-LTA-NOFO_FINAL.pdf	Planning and local technical assistance investments to support economic development, foster job creation, and attract private investment in economically distressed areas.	
Community Development Block Grants (CDBG) https://www.mass.gov/info-details/community-develop- ment-block-grant-cdbg#how-to-apply-	 Conduct broadband needs assessment. Install wiring, fiber optic cables, and permanently affixed equipment. Provide digital literacy classes. 	
Workforce Innovation and Opportunity Act (WIOA) https://www.dol.gov/agencies/eta/grants/apply	Digital literacy- use of technology to improve teaching, learning, professional development, skill development and abilities, career guidance, supportive services, job search workshop, referral to jobs or training, workers' rights and complaint system information.	
English Language Acquisition State Grants https://www2.ed.gov/about/offices/list/oese/oss/technicalassis-tance/elstar-user-guide-state-support-network.pdf	Enhance instruction for English learners with digital resources	
CommCorps YouthWorks Funding https://commcorp.org/program/youthworks/	YouthWorks is a state-funded youth employment program that helps teens and young adults develop the skills and experience needed to find and keep jobs.	
Early Intervention Program for Infants and Toddlers with Disabilities https://www2.ed.gov/fund/data/award/idea/index.html	Assist with implementation of statewide systems of coordinated, comprehensive, multidisciplinary, interagency programs and extending early intervention programs.	
Determination of Need (DoN) https://www.mass.gov/determination-of-need-don	The goal of DoN and the framework for analysis by the Department of Public Health is to promote population health and increased public health value.	
USDA Community Connect Program https://www.rd.usda.gov/community-connect	The purpose of the Community Connect Program is to provide financial assistance in the form of grants to eligible applicants that will provide, on a "community -oriented connectivity" basis, broadband service that fosters economic growth and delivers enhanced educational, health care, and public safety benefits. Rural communities- extend access where broadband service is least likely commercially available	
USDA Telecommunications Infrastructure Loans & Loan Guarantees) https://www.rd.usda.gov/programs-services/telecommunications-programs/telecommunications-infrastructure-loans-loan-guarantees	This program provides financing for the construction, maintenance, improvement and expansion of telephone service and broadband in rural areas.	
High Cost Program (including Connect America Fund, Rural Digital Opportunity Fund and 5G Fund) https://www.usac.org/high-cost/	The federal universal service high-cost program is designed to ensure that consumers in rural, insular, and high-cost areas have access to modern communications networks capable of providing voice and broadband service, both fixed and mobile, at rates that are reasonably comparable to those in urban areas.	

Program	Type of Assistance		
USDA Distance Learning & Telemedicine Grants https://www.rd.usda.gov/programs-services/telecommunications-programs/distance-learning-telemedicine-grants	DLT program helps fund distance learning and telemedicine services in rural areas to increase access to education, training, and health care resources that are otherwise limited or unavailable.		
YouthWorks Funding https://commcorp.org/program/youthworks/	Youth employment program that supports skills training for youth up to age 25 from households earning less than 200% of the federal poverty rate.		
Massachusetts Community Health and Healthy Aging Funds - Determination of Need (DoN) https://mahealthfunds.org/	This program aims to enhance the capacity of multi-sector collaboratives to authentically engage residents and work together to remove barriers to health. Funding can establish training opportunities for local consumers regarding tracking medical records		
Residential Internet Retrofit Program https://broadband.masstech.org/retrofit	Initiative to equip public and affordable-housing units across the state with high-speed internet for current and future residents by upgrading in-building telecommunications wiring, equipment, and infrastructure within older housing developments.		
Lead for America - America Connection Corps https://www.americanconnectioncorps.org/	The nation's premier AmeriCorps service experience, advancing economic prosperity in rural and emerging communities. 15 American Connection Core Members are being recruited and placed in full-time, year-long fellowships to serve as Massachusetts-based, "boots on the ground" support at local host site organizations to help with expanding broadband awareness and digital adoption.		
Connect Humanity https://connecthumanity.fund/	 Digital equity connectivity plan Community engagement, survey work and mapping, technical design, and financial modeling. Support community connectivity providers to get "investment ready". Grants for enabling solutions- digital skills, relevant content, workforce development. Promote a diverse broadband sector Research on financing and operating models for community connectivity providers Fund training to promote skills to build and maintain community broadband 		
Centri-Tech Foundation Digital Integrators Pilot Program https://www.digitalintegrators.org/	CBOs can use the funding to apply the Community Development Framework for Digital Advancement to local digital equity and inclusion efforts. Organizations can use the tool for program design, implementation, and evaluation.		

Program	Type of Assistance
Bank foundations https://www.digitalequity.us/resources/cra-funding-guide-for-digital-equity/	Bank foundations can provide funding for the following digital equity-related progrograms and services: broadband, hardware/devices, tech support, librarian assiatance, digital skills.
Patrick J. McGovern Foundation https://www.mcgovern.org/grants/?exposed_mf_search&exposed_taxonomy_focusarea%5B0%5D=22&exposed_grant_approval_date_sort=date_desc&FZEWGNafiqRBuoy=0dfbn.rMQwW&iwNIhrR=VSj-dZGI9sn5FUH&mb_nJCugrtsAIHc=%5BG3illaOL0vuBdj	This foundation has awarded new grants for innovative data- and AI-driven approaches that support digital transformation of health systems and healthcare across the globe.
Project UP by Comcast https://corporate.comcast.com/impact/project-up	Connectivity & adoption: Connecting people to the internet, technology, and resources needed to succeed in a digital world. Skills & creativity: Creating opportunities and new caeer pathways in media and technology and opening doors for new voices to be heard and stories to be shared. Entrepreneurism: Equipping entrepreneurs and small business owners with the skills, digital resources, and opportunities they need to thrive. Western Massachusetts Giving Examples: Comcast awarded the Alliance for Digital Equity with a \$100,000 Comcast NBCU Adoption Innovation Fund grant. They have provided an additional \$70,000 last year and are working with them on another \$50,000 grant this year. Comcast has also donated 250 laptops for distribution throughout the region. Comcast has provided the Community Action of Pioneer Valley with a \$20,000 grant to support the Healthy Families Program/ Digital Access and Young Parents Program: Digital Literacy/Online Ed Program. Comcast also donated 50 laptops for distribution to the community. Massachusetts Broadband Institute, Comcast and LEAD for America's American Connection Corps to Expand Broadband Adoption. Comcast is currently working with MBI and LEAD for American to continue this partnership again this year.

APPENDIX D: Greenfield Digital Equity & Internet Access Survey

The City of Greenfield is working with the Franklin Regional Council of Governments (FRCOG) to develop a Municipal Digital Equity Plan. Development of the Plan is part of the Federal Bipartisan Infrastructure Law of 2021 which included funding to help ensure that all US households, small businesses, and community anchor institutions (including schools, organizations, and government offices) have access to high-speed internet. Your feedback on this survey will be considered as we develop our plan and help us understand barriers to internet access, affordability, and adoption to help close the digital divide. This survey should be completed by one individual per household.

Section 1: Please answer the following questions.	Section 3: Please answer the following questions only if you CANNOT connect to the internet at home.		
What is your address?			
Do you have internet service in your home? YES – Please proceed to Section 2 below	If you do not have internet service in your home, what is the reason?		
NO – Please skip to Section 3 (flip this page over)	Service is not available in my area Service is too expensive		
Section 2: Please answer the following questions only if you CAN connect to the internet from home.	l am concerned about online privacy or safety l don't feel confident navigating the internet or using online tools		
Who is your internet service provider?	_I can't afford or access a device to use the internet _I don't want / don't use the internet.		
What kind of internet service do you have at home? Please check all that apply.	Other (please specify):		
Data plan for a smart phone, hotspot, or tablet Home wireline connection (cable, fiber, DSL, etc.) Dial-up internet Satellite internet How well does your home internet service work? Good enough to meet my household's needs Not good enough to meet my household's needs I don't know Is your home internet service bundled with other services such as telephone or TV? Yes No	If you do not have internet at home, where do you go to use the internet? Please check all that apply. _A workplace _A friend or family member's home _School, college, or university _A library or community center _A business such as a restaurant, cafe, or bookstore (e.g., McDonald's, Taco Bell, Starbucks, etc.) _A public space such as a park or government building _On public transit _I do not regularly access internet in these or any other spaces _Other (please specify):		
How much do you pay for the internet every month? \$	Section 4: All respondents should answer these questions.		
How hard is it for you to pay your internet bill? Very hard Somewhat hard Not too hard Not at all hard	Does everyone in your household have access to the computer devices they need to meet their everyday needs for internet use? (Computers, smart phones, tablets, or other internet enabled devices)?		
When complete, skip to section 4 below.	YesNo		

If yes, which of the following of the time to connect to the apply)			
Cell phone Laptop computer device) Other (please specify):	Desktop computer Tablet (or similar		
Other (please specify).			
If no, what's the main barrier _CostNot sure ho _Concerns about online priv _Don't need one	ow to use it		
Section 5: All respondents should answer these questions. (We collect demographic information so that we can make sure we are representing all neighborhoods and groups across Greenfield.)			
What is your age?			
18 to 24	35 to 44 75 and older		
What is your gender identity	?		
WomanManNon-binary			
Gender fluid OtherPrefer not to answer			
Which of the following best (Select all that apply) White or Caucasian	describes your race?		
 Write of Cadcasan Black or African-American Hispanic, Latino, or Spanish origin, such as Mexican, Puerto Rican, or Cuban Asian or Asian-American 			
Native American/American Indian/Alaska Native Pacific Islander/Native Hawaiian Some other race (please specify) Prefer not to answer			
What is your total annual ho sources, and before taxes?	ousehold income from all		
Less than \$22,000	_\$22,000 to \$29,999		
_\$30,000 to \$36,999 _\$37,000 to \$44,999	\$45,000 to \$52,999		
\$53,000 to \$59,999 \$60,000 or more	Prefer not to answer		